

ALASKA PENINSULA AND ALEUTIAN ISLANDS MANAGEMENT

AREAS SAC ROE HERRING MANAGEMENT PLAN, 1998

By

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## INTRODUCTION

This document is intended to provide commercial herring fishers and buyers with information and guidelines the Alaska Department of Fish and Game (ADF&G) will use to manage the Alaska Peninsula and Aleutian Islands Management Areas commercial sac roe herring fisheries.

The Alaska Peninsula and Aleutian Islands Management Areas (Figures 1-7) are described as Management Area "M" and are divided into three subareas: (1) the North Peninsula, consisting of Bering Sea waters extending west from Cape Menshikof to Cape Sarichef; (2) the South Peninsula, consisting of Pacific Ocean coastal waters extending west of Kupreanof Point to 163°30' W.long. (the south side of Unimak Island near Cape Lazaref); and (3) the Aleutian Islands, consisting of Bering Sea waters extending west of Unimak Pass and Pacific Ocean waters extending west of 163°30' W.long. (the south side of Unimak Island near Cape Lazaref) to the International Date Line.

The North Peninsula sac roe herring fishery has occurred annually since 1982, with the exception of the 1997 season that resulted in no harvest due to poor market conditions. The most recent 10 year (1988-97) average harvest is 764 tons (Table 1). The South Peninsula sac roe herring fishery has occurred annually since 1979 (except in 1983 when the Alaska Board of Fisheries (BOF) allocated the herring harvest to the food and bait fishery). The 1988-97 average harvest is 162 tons (Table 1).

The department will manage the fisheries per the Bering Sea Herring Fishery Management Plan which provides for harvests of 0-20% of the available spawning biomass (ADF&G 1997; 5 AAC 27.060). The herring quality will be determined by the permit holder and the buyer. Roe recovery will not be a criteria for emergency openings or closures except in cases where excessive wastage is expected to be a factor. Permit holders are encouraged to check with their markets prior to fishing to determine industry standards for product quality and size. All herring harvested during the sac roe season which are sold as bait or discarded due to quality problems will be included as part of the total sac roe herring harvest.

Guideline harvest levels (GHL's) are established for management units with individual stocks that have a history of sac roe herring harvests (Table 2). Management units that lack an extensive history of harvest or have no record of observed biomass will be opened and designated as exploratory areas.

Inseason emergency order closures will occur as the GHL for each unit is achieved. Closures may be necessary prior to attaining a GHL if the fishery performance or aerial surveys indicate that a stock biomass is less than anticipated. GHL's may be adjusted up or down based on observed stock abundance. Closures of exploratory areas may occur based on inseason information such as observed stock abundance or harvest numbers.

Inseason emergency orders will be broadcast on the single side band radio on 4125 and 3230 Khz and on the VHF radio on channels 6 and 72, or other channels if arrangements are made with the local representative of ADF&G. Current announcements will be available 24-hours a day on the ADF&G record-a-phone in Sand Point at 383-2334.

## MANAGEMENT PLAN

### *Registration Requirements*

#### **Tenders and Processors**

**North Peninsula.** Registration must occur prior to buying or tendering herring in North Peninsula waters. For North Peninsula fisheries the skipper/owner must register tenders and buyer-processors on-the-grounds at the ADF&G Port Moller office. Registration of tenders and buyer-processors in North Peninsula waters outside of the Port Moller District (Port Heiden and Amak Districts), may be done using radio, fax, or phone.

**South Peninsula.** For South Peninsula and Aleutian Island fisheries, the skipper/owner can register tenders and buyer-processors at the ADF&G offices in Cold Bay, Sand Point, and Dutch Harbor. Registration must occur prior to buying or tendering herring in South Peninsula and Aleutian Islands waters. Catch reporting instructions will be explained in detail during registration. If registering in person causes undue inconvenience, fishers may contact the ADF&G in Sand Point or Port Moller to make other arrangements.

***Local offices of the Alaska Department of Fish and Game are:***

#### ***Sand Point:***

Alaska Department of Fish and Game  
P.O. Box 129  
Sand Point, AK 99661  
phone (907) 383-2066  
fax (907) 383-2606  
record (907) 383-2334  
VHF 6 and 73  
Single Side Band 3230  
KWB 362

#### ***Dutch Harbor:***

Alaska Department of Fish and Game  
P.O. Box 920587  
Dutch Harbor, AK 99692  
phone (907) 581-1219  
fax (907) 581-1572  
VHF 9  
Single Side Band 4125  
WIM 76

#### ***Cold Bay:***

Alaska Department of Fish and Game  
P.O. Box 50  
Cold Bay, AK 99571  
  
phone (907) 532-2419  
fax (907) 532-2470  
VHF 6  
Single Side Band 3230 and 4125  
KCO 332/WHW 906

#### ***Port Moller:***

Alaska Department of Fish and Game  
P.O. Box 163  
Port Moller, AK 99571-8999  
  
phone (907) 987-2216  
fax (907) 987-2215  
VHF 72  
Single Side Band 3230  
WNGV 537

## **Fishing Vessels**

There are no registration requirements for either seine or gillnet vessels.

## ***Fishing Periods***

The Port Moller and Port Heiden Districts of the North Peninsula may open for commercial herring fishing from April 15 through June 30, but only during periods established by emergency order(s). A minimum of 6 hours advance notice will be given prior to any fishing period in the Port Moller and Port Heiden Districts, unless it is an extension of a fishing period in progress. If effort decreases to a level where overharvesting a stock does not become a concern, the 6 hour notice may be reduced or eliminated.

The Amak District commercial sac roe herring fishery will be opened by emergency order and the season will run from April 15 through June 30. If the department determines the catch may exceed the GHLL, fishing time in the Amak District of the North Peninsula and Aleutian Islands waters may be adjusted to prevent overharvest.

The 1998 commercial sac roe herring fisheries in the Sand Point, Pavlof, and King Cove Districts will be opened by emergency order from April 15 through July 15. Fishing periods will start at 12:00 noon on odd number days of the month and close at 12:00 noon on even number days of the month, followed by 24 hour closed periods. The season will close for each management unit by emergency order when their GHLL's are achieved or the potential for overharvesting becomes a concern.

The Aleutian Islands management area which includes the Unimak, Akutan, Unalaska, Umnak, and Adak Districts will remain open to commercial sac roe herring fishing from April 15 to June 15 on an exploratory basis. Fishing periods will be established by emergency order and will be open on a continuous basis or until otherwise noted.

## ***Catch Reporting***

Processors and tender operators must report daily to ADF&G while involved in Alaska Peninsula Area sac roe herring fisheries. The daily reports must include tallies of herring harvest and accurate estimates of herring onboard tenders that have not yet delivered to the processor. Individual codes will be provided for each tender or processor required to report catches on a daily basis.

## ***Fish Tickets***

Fishers must provide specific catch locations (statistical area or a specific landmark) to buyers, so that they can be recorded on fish tickets. Fish tickets must be delivered to a local ADF&G commercial fishery representative prior to transporting herring out of any subarea (North and South Peninsula or Aleutian Islands), and before completing operations and leaving Management Area M and no later than 10 days after termination of buying operations in the area. For information and catch reporting during

the sac roe herring fisheries in the Aleutian Islands west of Unimak contact ADF&G in Dutch Harbor on Single Side Band 4125 Khz or VHF 9 radios.

#### ***Gillnet And Seine Specifications (5 AAC 27.631 and 5 AAC 27.632 in part)***

The aggregate length of herring gillnets in use by a herring CFEC permit holder may not exceed 150 fathoms.

No purse seine may be more than 1,000 meshes in depth and more than 100 fathoms in length.

#### ***Aircraft***

There is no restriction on the use of aircraft.

#### ***Industry Cooperation***

Cooperation of fishers, tender operators, spotter pilots, and processors is encouraged when ADF&G personnel request herring samples from the commercial catch, or from juvenile or spawnout schools inadvertently seined. Samples will be used for monitoring age composition, which assists in determining the health of a stock and in forecasting next years run strength. ADF&G will also be monitoring spawning activities and will be soliciting information on commercial herring sightings to supplement information gathered by department personnel. Fishers and spotter pilots are encouraged to provide biomass and spawning information to ADF&G. These reports will remain confidential. Past cooperation has proven valuable in evaluating stock status and in gaining management information.

#### ***North Peninsula***

The 1998 North Peninsula sac roe herring fishery GHL ranges from approximately 0 to 150 tons and the entire GHL is expected to be taken in the Port Moller District. This GHL range is based on the 1997 biomass estimate and applying a sliding scale exploitation rate to the estimate. However, adjustments to the GHL may be made inseason once herring biomass has been quantified. The following table shows the sliding scale allowable harvest on the estimated mature biomass when it is assumed the threshold of 1,000 tons will be reached (5 AAC 27.060. Bering Sea Herring Fishery Management Plan).

Stock Size (Short Tons)	Sliding Scale Exploitation Rate	Allowable Harvest
Less than 1,000	0%	0
1,001-1,500	10%	0-150
1,501-1,999	10%	150-200
2,000-2,500	15%	300-375
2,501-3,000	15%	375-450
>3,000	20%	>450

At low biomass levels, the department will take a conservative fishery management approach to allow the local stocks to rebuild and to account for North Peninsula herring that may contribute to the Dutch Harbor food and bait fishery. Rowell et.al. (1990) estimated that up to 22% of the Dutch Harbor food and bait harvest may be non-Togiak herring. Based on estimated travel time of eastern Bering Sea herring stocks to Dutch Harbor and the fishery opening date of July 15, North Peninsula stocks may comprise the majority of the non-Togiak component.

### *South Peninsula*

The 1998 South Peninsula sac roe herring fishery combined GHL is 60 tons. Two management units have GHL's: Stepovak Bay Section (15 tons) and Canoe Bay Section (45tons).

The General Section (Shumagin Islands) of the Sand Point District, the Seal Cape-Wosnesenski Section of the Pavlof District, and the General Section of the King Cove District will be opened on April 15 concurrent with the balance of the South Peninsula which is open to exploratory fishing. No biomass estimates exist for these sections and GHL's have not been established. Harvests from these sections will be kept small (no more than 25 tons of herring will be allowed to be harvested from waters near any single island or bay) until the department makes an estimate of the stock biomass. However, in the General Section (Shumagin Islands) of the Sand Point District a maximum of 25 tons of herring may be harvested from the inner islands (Andronica Island west to Unga Island) and a maximum of 25 tons of herring from the outer islands (Nagai Island east to Simeonof Island). ADF&G will monitor exploratory fishing activity by requiring industry to report catches daily and by ADF&G assessing biomass during aerial surveys.

### *Aleutian Islands*

All Aleutian Islands Districts will be open for exploratory fishing. However, catches from these districts will be kept small (no more than 25 tons of herring will be allowed to be harvested from waters near any single island or bay) until ADF&G personnel make an estimate of the stock biomass. The department will monitor exploratory commercial activity by requiring industry to report catches daily and by ADF&G personnel assessing biomass during aerial surveys.



### ***Capelin Policy***

Capelin are recognized as an important forage fish species, comprising an important part of the diet of commercial groundfish species, marine mammals and seabirds. Because of the important role of capelin in the ecosystem, lack of good information on the abundance of capelin and the lack of management funding, the Alaska Peninsula capelin fishery will be managed to allow for a limited commercial fishery. The total allowable harvest will be 40 tons in each of the North (Bering Sea) and South (Pacific Ocean) sides of the Alaska Peninsula Area. This fishery will be opened by emergency order and a permit is required before fishers can participate in the fishery. This permit can be obtained from either the Port Moller or Sand Point Fish and Game offices.

## LITERATURE CITED

- ADF&G (Alaska Department of Fish and Game). 1996. 1996-97 Commercial herring fishing regulations, 1996 edition. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Juneau.
- Cofske, J.P., R.D. Campbell, and R.L. Murphy. 1997. Alaska Peninsula and Aleutian Islands Management Areas sac roe herring report and the Aleutian Islands Management Area food and bait herring report, 1996. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K97-11, Kodiak.
- Funk, F.C. 1991. Overview of Bering Seas herring migration, stock status, and commercial fisheries. Alaska Department of Fish and Game, Commercial Fisheries Division, Regional Information Report 5J91-13, Juneau.
- Rowell, K. A., H. J. Geiger, and B. G. Bue, 1990. Stock Identification of Pacific Herring in the Eastern Bering Sea Trawl Bycatch and in the Dutch Harbor Directed Food and Bait Fishery. Proc. Int. Herring. Symposium. p. 255-278.

Table 1. Alaska Peninsula Management Area commercial sac roe herring harvest by time period and area, 1979-97.

Year	North Peninsula		South Peninsula		Total
	Harvest (Tons)	Harvest Time Period	Harvest (Tons)	Harvest Time Period	
1979	0.0		10.1	July 4-July 4	10.1
1980	0.0		453.8	May 18-July 14	453.8
1981	0.0		797.4	May 9-June 23	797.4
1982	505.5	May 31-June 12	138.3	May 31-June 14	643.8
1983	627.0	May 9-May 29	0.0	Fishery Closed <sup>b</sup>	627.0
1984	431.2	May 24-June 8	210.4	May 13-June 1	641.6
1985	710.2	May 24-June 4	287.8	June 1-June 11	998.0
1986	894.4	May 18-May 30	281.9	June 7-June 14	1,176.3
1987	513.7	May 9-June 5	319.0	June 8-June 19	832.7
1988	294.3	May 17-June 15	376.7	May 31-June 20	671.0
1989	729.0	May 28-June 23	310.3	May 13-June 19	1,039.3
1990	272.8	June 4-June 19	312.2	May 14-June 14	585.0
1991	1,313.0	May 17-July 4	157.4	May 16-June 11	1,470.4
1992	3,969.0	May 23-June 17	180.3	June 4-June 7	4,149.3
1993	535.9	May 8-June 9	97.0	May 27-June 9	632.9
1994	89.8	May 21-June 7	8.2	June 2-June 3	98.0
1995	337.3	May 29-June 20	62.7	June 6-June 17	400.0
1996 <sup>a</sup>	95.8	June 12-June 18	124.4	May 10-June 27	220.2
1997	0.0	-	0.0	-	0.0
1988-97 Average					
	763.7		162.9		926.6

<sup>a</sup> In the South Peninsula 7 tons were included in the harvest figure, but were not sold due to low roe percentage.

<sup>b</sup> Herring harvest was allocated to the food and bait fishery in 1983.

Table 2. Alaska Peninsula and Aleutian Islands Management Areas sac roe herring guideline harvest levels, by management area, 1998<sup>a</sup>.

Management Area	Guideline Harvest Level (Tons)
<i>North Peninsula</i>	
Amak District	b
Port Moller District <sup>c</sup>	0-150
Western Section	b
Deer Island Section <sup>d</sup>	c
Herendeen Bay Section	c
Inner Moller Bay Section	c
Outer Moller Bay Section	c
Bear River Section <sup>e</sup>	c
Port Heiden District <sup>f</sup>	b
<i>North Peninsula Total</i>	0-150
<i>South Peninsula</i>	
Sand Point District	
Stepovak Bay Section	15
Swedania Point-Balboa Bay Section	b
Point Aliaksin-Beaver Bay Section	b
General Section (Shumagin Islands)	b
Pavlof District	
Canoe Bay Section	45
Pavlof Bay Section	b
Seal Cape-Wosnesenski Section	b
General Section (Volcano Bay)	b
King Cove District	
Belkofski Section	b
Deer Passage Section	b
Cold Bay Section	b
General Section	b
<i>South Peninsula Total</i>	60

-Continued-

Table 2. (page 2 of 3)

Management Area	Sac Roe Guideline Harvest In Short Tons
<i>Aleutian Islands</i>	
Unimak District	b
Akutan District	b
Unalaska District	b
Umnak District	b
Adak District	b
<i>Guideline Harvest Total<sup>a</sup></i>	100-250

<sup>a</sup> The Aleutian Islands Management Area is open for exploration; no deliveries have ever been made from the Aleutian Islands. Portions of a section, district, or area may be closed if it is suspected that additional harvests in a given location will exceed 20% of the spawning biomass.

<sup>b</sup> All areas without guideline harvest levels are open for exploration. Harvests in these areas will be kept small until ADF&G is able to document the spawning biomass. For the General Section of the Sand Point District (Shumagin Islands), Seal Cape-Wosnesenski Section, The General Section of the King Cove District, Amak District, Western Section of the Port Moller District, and the Aleutian Islands, no more than 25 tons of herring will be allowed to be harvested from the waters near any single island or bay in exploratory areas unless ADF&G documents a herring biomass that would allow a larger harvest.

<sup>c</sup> Herring abundance in the Port Moller District is difficult to document. The 1998 herring abundance may justify a larger catch than 150 tons, however to increase the guideline harvest level a larger than expected spawning biomass must be documented by ADF&G. A sliding scale exploitation rate was used to determine the 1998 GH.

Stock Size (Short Tons)	Sliding Scale Exploitation Rate	Allowable Harvest
< 1,000	0%	0
1,001-1,500	10%	0-150
1,501-1,999	10%	150-200
2,000-2,500	15%	300-375
2,501-3,000	15%	375-450
>3000	20%	>450

<sup>d</sup> Herring harvested in the Deer Island Section of Herendeen Bay will be counted against the Herendeen Bay guideline harvest level.

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Table 2. (page 3 of 3)

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- <sup>e</sup> Herring harvested along the Bering Sea Coast will be counted against the Port Moller and Herendeen Bays guideline harvest level if it is suspected that these herring were traveling into Port Moller or Herendeen Bays.
- <sup>f</sup> In 1992, commercial quantities of herring were harvested for the first time in the Port Heiden District. The 1998 herring abundance may justify a catch larger than 25 tons, however to increase the guideline harvest level a larger than expected spawning biomass must be documented by ADF&G. The commercial herring fishery will be managed conservatively until adequate data is obtained to warrant a liberal management approach. Herring harvested along the Bering Sea coast will be counted against the Port Heiden guideline harvest level if it is suspected that these herring were travelling in to Port Heiden Bay.
- <sup>g</sup> Total does not include harvests that may occur in areas open to exploration.

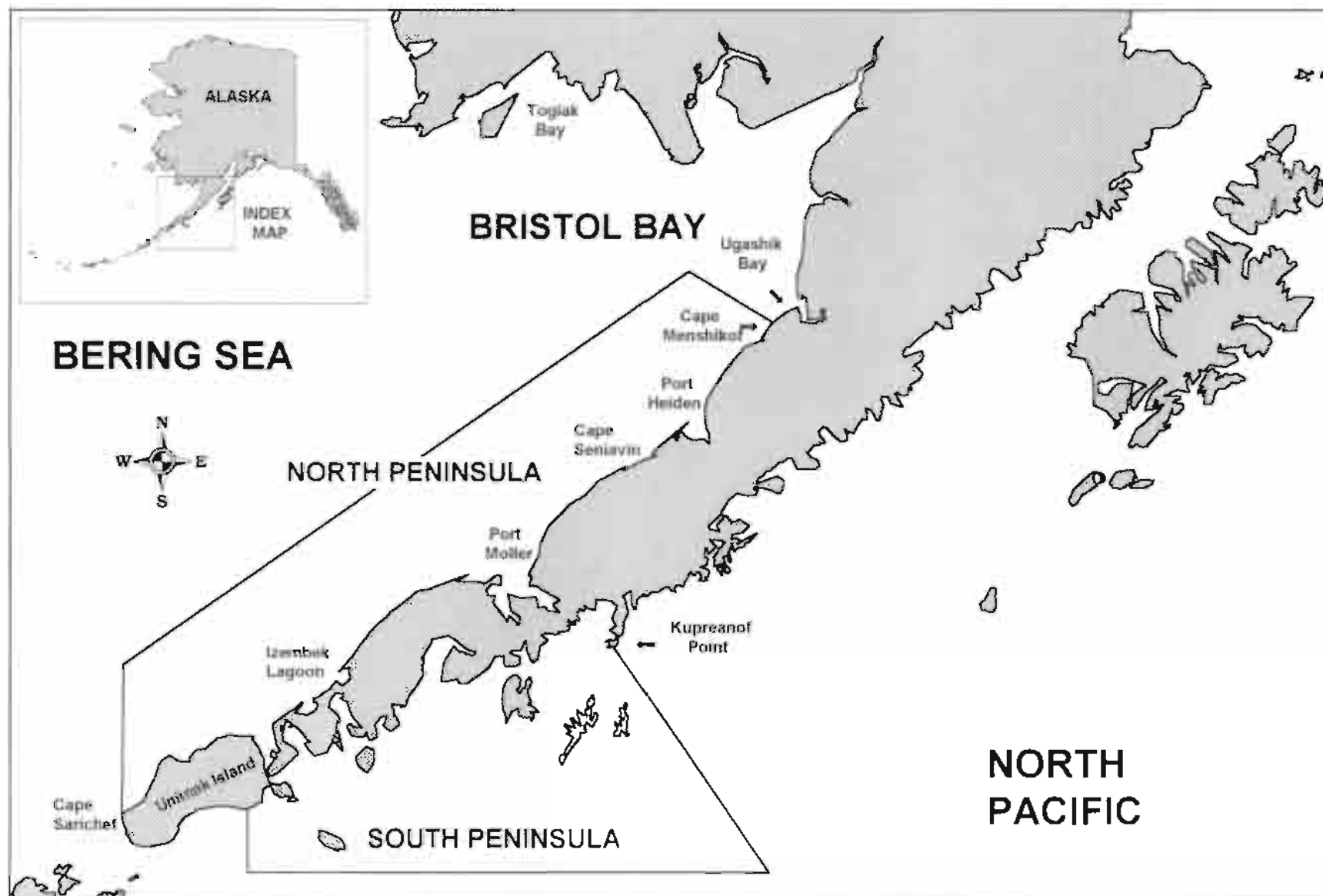


Figure 1 Map of the Alaska Peninsula Herring Management Area, the area on the Pacific Ocean portion of the map is from Kupreanof Point to Unimak Island and on the Bering Sea from Cape Sarichef to Cape Menshikov

Figure 2. Map of the Alaska Peninsula Area from Cape Sarichef to Pavlof Bay with the statistical herring fishing areas shown.



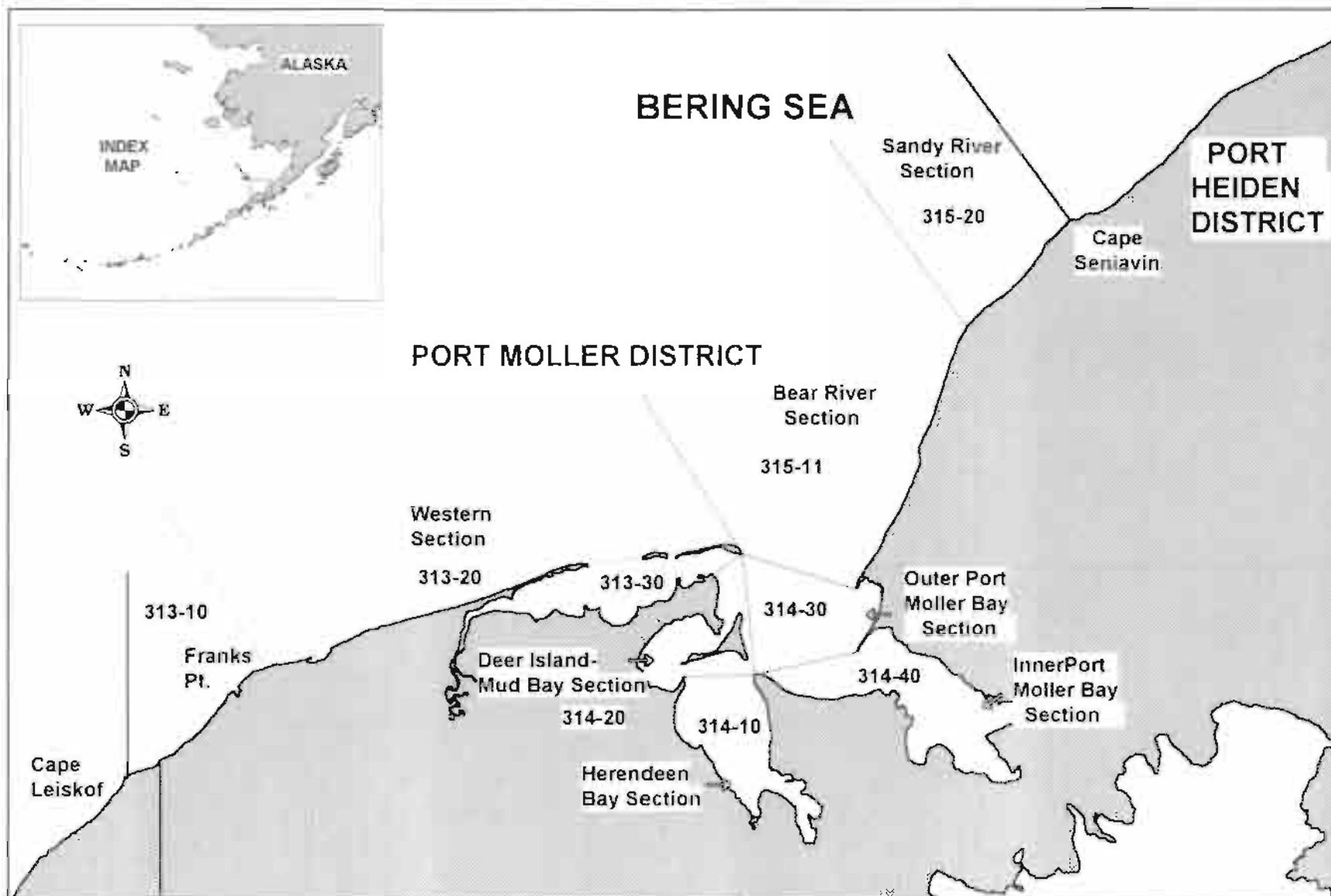


Figure 3. Map of the Port Moller District with the statistical herring fishing areas shown.

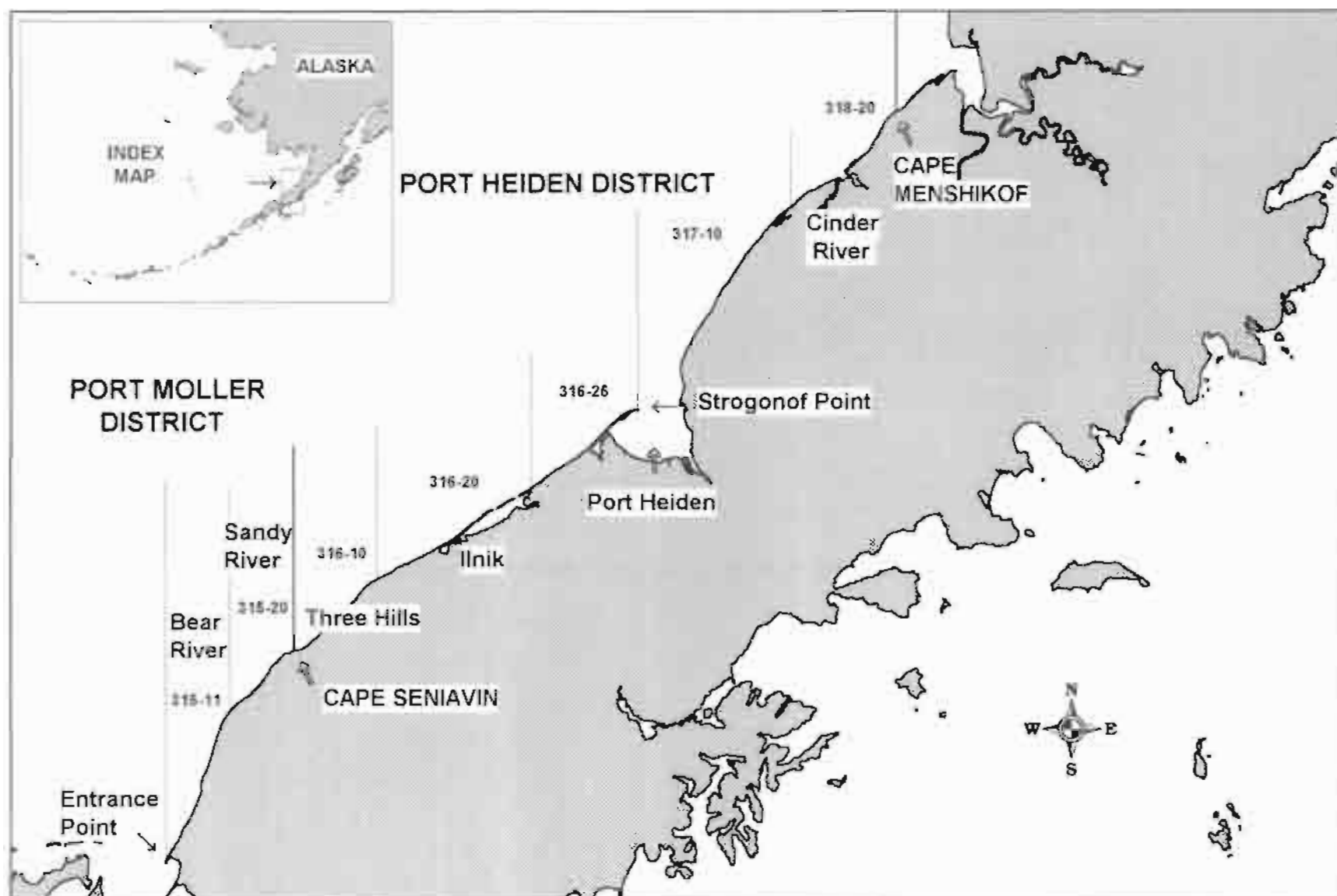


Figure 4. Map of the Alaska Peninsula Area from Entrance Point to Cape Menshikof with the statistical herring fishing areas shown.

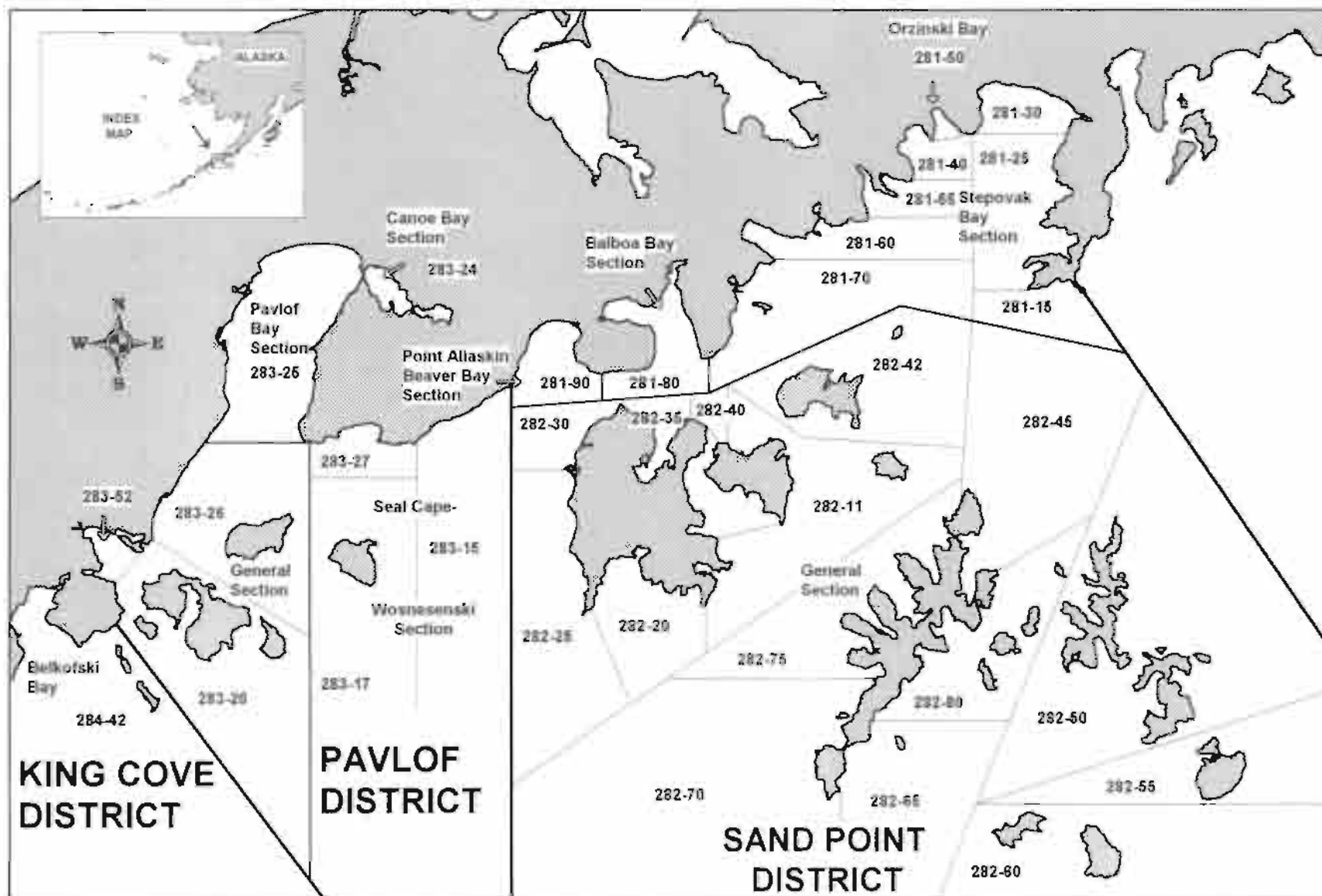


Figure 5. Map of the Alaska Peninsula Area from Belkofski Bay to Kupreanof Point with the statistical herring fishing areas shown.

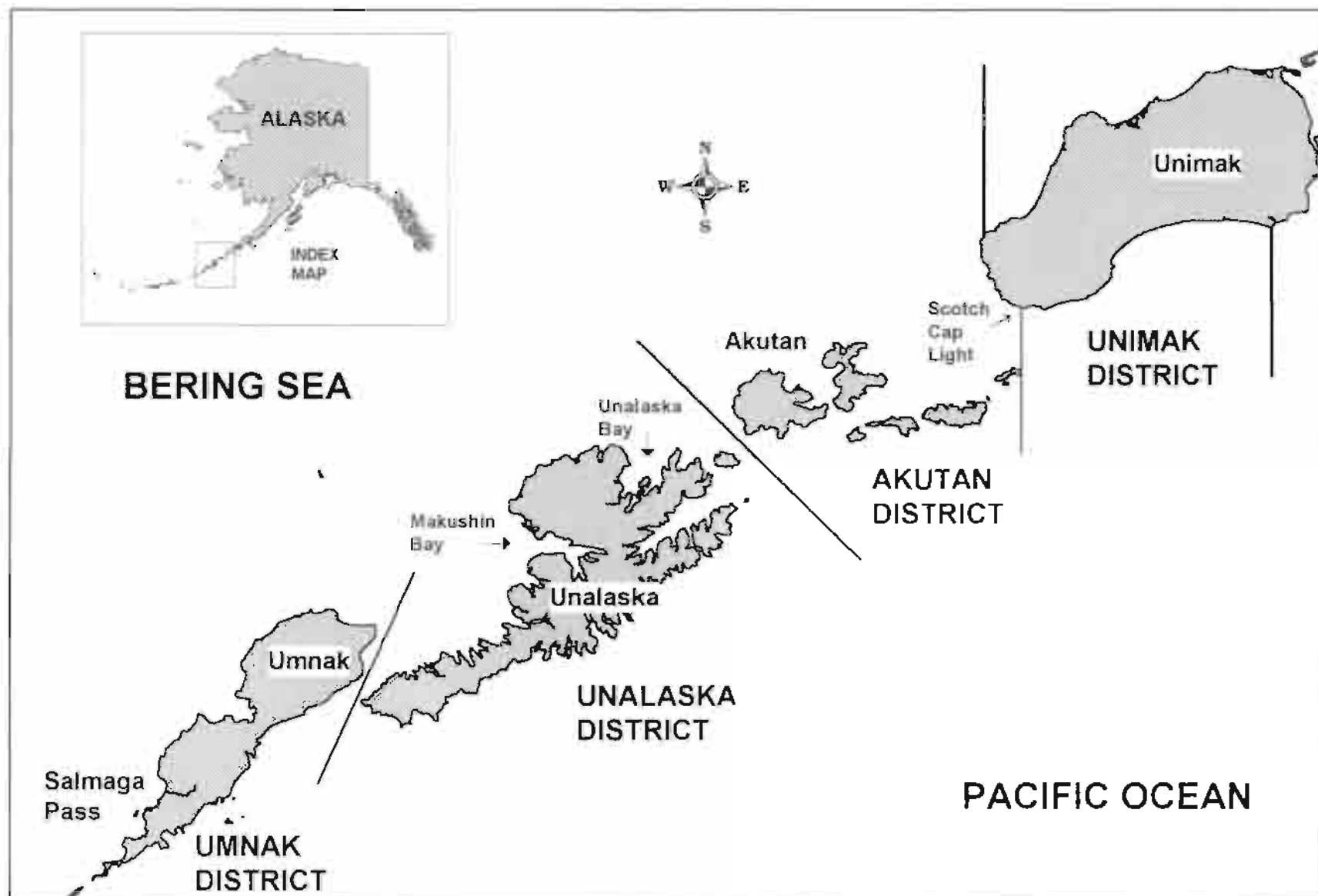


Figure 6. Map of the Aleutian Islands, "Dutch Harbor" Management Area, from Salmaga Pass to Unimak Island with the fishing districts shown

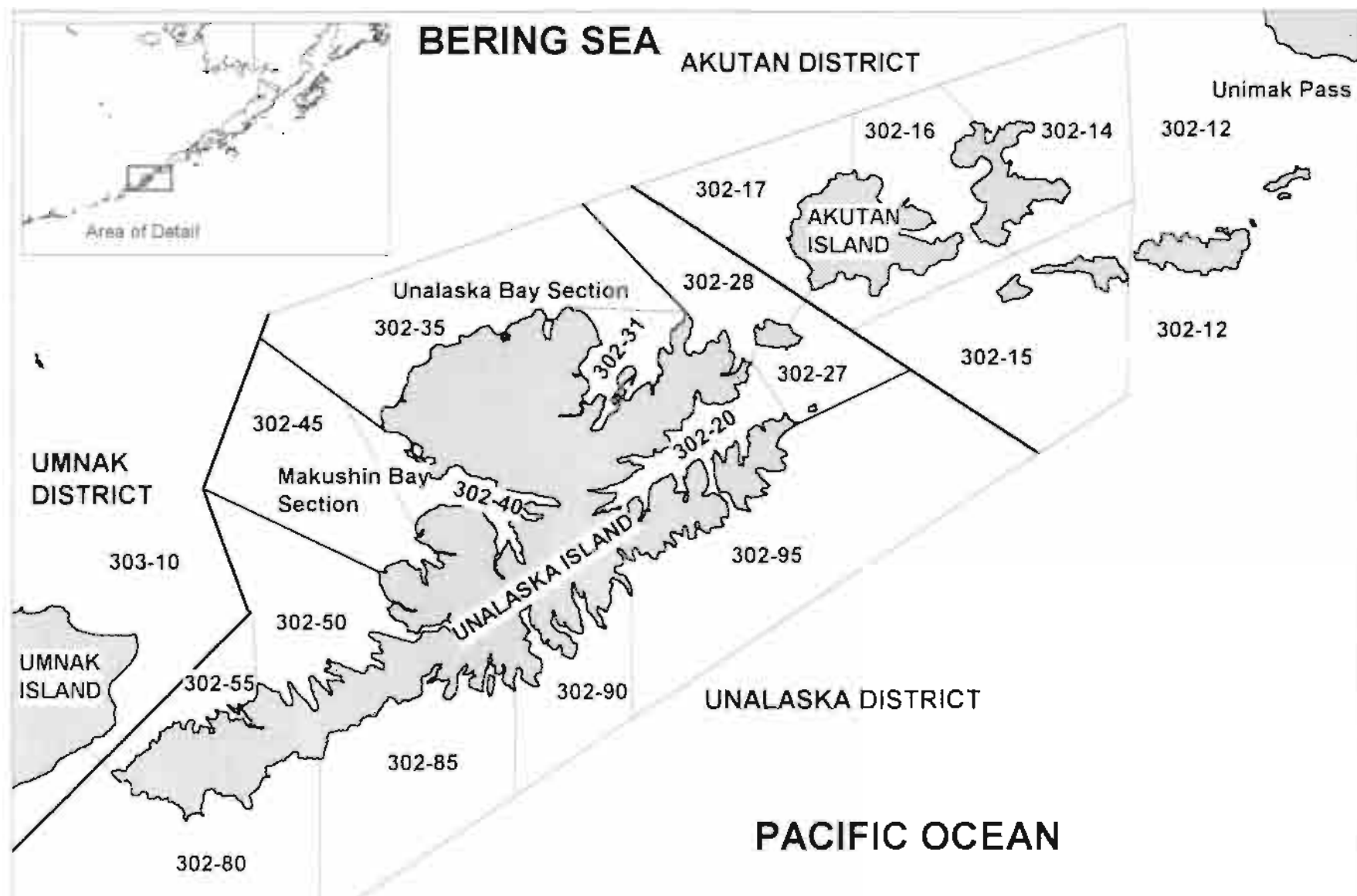


Figure 7. Map of Aleutian Islands Area from Umnak Island to Unimak Pass with the statistical herring fishing areas shown

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